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Alexander J. Burke Intellectual Property Department 5th Floor 170 Wood Avenue South Iselin, NJ 08830				
EXAMINER				
NGUYEN, TRAN N				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/629,034

Applicant(s)

ZALESKI, JOHN R.

Examiner

Tran Nguyen

Art Unit

3626

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-12 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-12 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 07/28/2003, 11/18/2004
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Notice to Applicant

This communication is in response to the communication filed 12/19/2007.

Pending claim(s): 1-2, 4-12, 17. Withdrawn claim(s): 3, 13-16, 18-37.

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-2, 4-12, 17 in the reply filed on 12/19/2007 is acknowledged. The traversal is on the ground(s) that claims 3, 13-16, 36, 18-35, 37 may be readily searched and examined together with claims 1-2, 4-12, 17 given their commonality of elements and claimed arrangement. This is not found persuasive because although these groupings may share some common elements, the separate groupings recite different combinations that have separate utility, have different classification, have divergent subject matter (patient monitoring vs. displaying stored data), require a different field of search for the different claimed arrangements, and the prior art applicable to one grouping would not likely be applicable to another grouping. See previous Office Action.

The requirement is still deemed proper and is therefore made FINAL.

Priority

Acknowledgment is made of Applicant's claim for priority to application 60399338 and 60399282 both filed 07/29/2002.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2, 4-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 1, this claim recites a "system" comprising "a communication interface", "a data processor", and "an output processor".

The specification discloses: "The processor 126 may be implemented in software and/or hardware" (page 5 line 18-19).

When read in light of the specification and the level of ordinary skill in the art, Examiner, in applying the broadest and most reasonable interpretation, interprets "interface" to recite software embodiments, and "processor" to recite software and/or software embodiments.

Although claim 1 may envelop some embodiments of software tangibly embodied on a computer readable medium, claim 1 also envelops some embodiments that are software *per se*, i.e. wherein the processor is implemented purely in software as is consistent with the specification.

As such, the claim appears to envelop software *per se*. Therefore, the claim is directed towards nonstatutory subject matter. See MPEP 2106.01.

All claims dependent thereon, namely claims 2, 4-12, fail to remedy these deficiencies, and are therefore rejected for at least the same rationale.

Additional clarification is requested.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim(s) 1, 4-7, 9-10, 17 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Crawford (5331549).

As per claim 1, Crawford teaches a system (Abstract) capable of distributing digitized patient vitals data (reads on "patient medical parameters") (column 3 line 61-68), comprising:

(a) a central server (reads on "a communication interface") (Figure 1 label 16) capable of receiving patient vital signs data in an RS485 format (reads on "a first data format") (column 4 line 5-27) from a plurality of patient monitors attached to a plurality of patients (Figure 1 label 12), wherein the patient vital signs data is capable of being monitored and received at a sporadic, semi-continuous, or continuous level specified by

a user (reads on "a user selectable acquisition receiving interval") (column 12 line 10-23);

(b) the central server (reads on "a data processor") capable of using software embodied on the central server to selected a subset (reads on "filtering criteria") of the received patient vital signs data for a specific patient (Figure 4), wherein a user is capable of using the system to specify selection criteria comprising:

(a) selecting a limited number of vital signs for monitoring (column 7 line 42, Figure 6 label 72);

(b) selecting a specific patient (Figure 4);

(c) excluding other vital signs that the vital signs monitor is capable of monitoring that are not selected (column 4 line 28-32, column 7 line 42, Figure 6 label 72);

(c) the central server (reads on "an output processor") capable of converting the RS485 format into another format suitable for communication with a PC (reads on "a different second data format") (Figure 1 label 24), and using software embodied on the central server to output the selected vital signs (Figure 6 label 72) with the time and date of the vital signs reading (Figure 4) for display on the PC (Figure 1 label 18).

As per claim 4, Crawford teaches that the central server is capable of using software embodied on the central server to select a subset of the received patient vital signs data for a specific patient (Figure 4), wherein a user is capable of using the system to specify selection criteria comprising:

(a) selecting a limited number of vital signs for monitoring (column 7 line 42, Figure 6 label 72);

(b) selecting a specific patient (Figure 4).

As per claim 5, Crawford teaches that the system is capable of storing the received patient vital signs data (Figure 1 label 20), wherein the stored data is capable of being used as part of:

(a) a historic record of vital signs (reads on "a patient electronic record") (column 2 line 24-25);

(b) an alarm (Abstract);

(c) a trends graph (reads on "raw data file") (Figure 7);

(d) a trends graph (reads on "a statistic complication file") (Figure 7).

As per claim 6, Crawford teaches that the system is capable of storing the received patient vital signs data including the type of vital sign for historical analysis (Figure 7).

As per claim 7, Crawford teaches that the system is capable displaying vital signs for a specific type selectable by a user via a radio button (reads on "a displayed user interface image") (Figure 7).

As per claim 9, Crawford teaches that the system is capable of displaying:

- (a) patient name (Figure 4 label 61);
- (b) patient room and bed (Figure 3-4);
- (c) location of the patient's room (reads on "a hospital unit identifier") (Figure 3);
- (d) the type of vital signs (Figure 4);
- (e) vital signs for the selected vital signs (Figure 4).

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of "at least one of".

As per claim 10, Crawford teaches that the system is capable of monitoring pulse (reads on "heart rate").

Insofar as the remainder of the claim is concerned, the applied art need not teach these limitations in view of "at least one of".

As per the set of claim(s): 17, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 1, respectively, and incorporated herein.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim(s) 2 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford in view of Official Notice.

As per claim 2, Crawford teaches that the central server is capable of sending digitized patient vital signs data to local or remote workstations (column 3 line 65-68) via modem (reads on "automatically selects" "communication protocol" and "destination port") (column 3 line 53-55).

Crawford does not teach HL7.

Official Notice is taken that the HL7 data format is old and well established in the art of health care messaging.

All component parts are known. The only difference is the combination of "old elements" into a single embodiment.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of the Official Notice within the embodiment of Crawford, since the operation of the messaging protocol is in no way dependent on the patient monitoring system, and a standard messaging protocol may

be used with a patient monitoring system to achieve the predictable result of communicating health care messages.

Claim(s) 8 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford in view of Matthews (5860124).

As per claim 8, Crawford teaches that the system is capable of monitoring large numbers of patients simultaneously (column 1 line 56-58, column 4 line 18-21). Crawford further teaches that data is stored for analysis at a later time (column 4 line 45-47). Crawford further teaches an embodiment wherein historical data is displayed for the previous twenty-four hours based on user selection (column 8 line 58-60).

Crawford does not teach "overwriting of existing data" or "adding to existing data in said storage file".

Matthews teaches a system capable of storing a stream of data, wherein if space is available, data is appended to the end of the file (column 2 line 40-51, Figure 5). Otherwise, the oldest portion of the file is overwritten (column 2 line 40-51, Figure 5).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Matthews within the embodiment of Crawford with the motivation of storing streaming data when storage space is exceeded (Matthews; column 2 line 36-37).

Claim(s) 11-12 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford in view of Teller (6605038).

As per claim 11-12, Crawford teaches displaying historical trend graph for a patient pulse rate (Figure 7).

Crawford does not teach "adaptively averages".

Teller teaches calculating an average heart rate over a predefined period of time, wherein heart rate is measured via a patient monitor (column 5 line 31-44).

All component parts are known. The only difference is the combination of "old elements" into a single embodiment.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Teller within the embodiment of Crawford, since the operation of the average heart rate is in no way dependent on the patient monitoring system, and a standard heart rate analysis may be used with a patient monitoring system to achieve the predictable result of determining trends for a patient's historical data.

As per claim 12, this claim is rejected for at least the same rationale as applied to claim 11 above, and incorporated herein.

Crawford further teaches selecting the period to display historical trend data (column 8 line 55-63, Figure 7).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Brown (5832448) teaches monitoring a plurality of patients.

Stutman (5576952) teaches selecting filtering of monitored patient information.

Any inquiry concerning this communication or earlier communications from Examiner should be directed to Tran N. Nguyen (Ken) whose telephone number is (571) 270-1310. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:00 pm, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, Examiner's Supervisor, Joseph Thomas can be reached on (571) 272-6776.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. N./

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Examiner, Art Unit 3626

02/08/2008

/C. Luke Gilligan/

Primary Examiner, Art Unit 3626